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1 1.

2 The combination of a mechanism for releasing its cocked condition in a raised  
3 position on a frame of an apparatus and a standard on which said frame is  
4 mounted for raising and lowering it, comprising  
5 a bell-crank assembly having a pivotal mount pivotally mounted on said frame and  
6 having a first arm and a second arm on opposite sides of the pivotal  
7 mount,  
8 bearing means mounted on said first arm,  
9 means for pivoting the second arm on the other side of the pivotal mount,  
10 said standard including a latch means,  
11 said bearing means engaging said latch means in the cocked condition,  
12 whereby  
13 upon actuation of said pivoting means, said bell-crank assembly turns on its  
14 pivotal mount to disengage said bearing means from said latch means and  
15 thereby lower the frame on said standard.

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18 2.

19 The combination of said mechanism and standard of claim 1 wherein  
20 said pivoting means comprises  
21 solenoid means having a reciprocable rod and being fixedly connected to said  
22 frame which when energized retracts said rod thereby turning said second  
23 arm about the pivotal mount.

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26 3.

27 The combination of the mechanism and standard of claim 2 wherein  
28 said solenoid means includes linkage connecting its rod to said second arm.

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1                   2                   4.

3                   The combination of said mechanism and standard of claim 3 wherein  
4                   said standard comprises  
5                   a threaded stem,  
6                   said latch means is threadedly mounted on said stem, and  
7                   handle means securely mounted to said latch means for adjusting said latch means  
8                   along the length of said stem,  
9                   whereby the position of the cocked condition of said mechanism to said frame is  
10                  adjustable along the length of said stem.

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13                  5.

14                  The combination of said mechanism and standard of claim 4 wherein  
15                  said latch means comprises  
16                  a threaded sleeve and a ledge at its bottom on which said bearing means seats in  
17                  a cocked condition for said mechanism.

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20                  6.

21                  The combination of said mechanism and standard of claim 5 wherein  
22                  said bearing mean comprises  
23                  a roller.

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2 7.

3 In an apparatus for testing the co-efficient-of-friction of a surface such as the  
4 surface of a road, the apparatus including

5 a frame including longitudinally-extending members and being suitably  
6 mounted on a plurality of standards adapted to engage such  
7 surface,

8 a plurality of standards supporting said frame,

9 a carriage slidably mounted on said members,

10 constant-force coiled spring means operatively connecting together said

11 frame and carriage for retracting said carriage along said members

12 upon completion of the testing operation by said apparatus,

13 a tire securely mounted to a wheel rotatably mounted on said carriage,

means on said frame for maintaining a span between the tire and such surface,

means for rotating the wheel by which the tire rotates,  
a gauging tape in alignment with one of said members, and

18 indicator means mounted on one of said members

19 carriage in a forward direction of motion for said car-

## 20 the improvement comprising

21 said rotating means including a motor having a shaft on which a first sp

22 wheel having teeth is a

23 speed of said tire upon its actuation,  
24 electronic means for actuating said rotating means whereby said carriage slides in

25 a direction of forward motion along said members,  
26 said electronic means including

26 said electronic means including  
27 means for encoding the an-

means for sensing the speed of said rotating means as the speed of said tire increases to reach the predetermined value in said electronic means, and

30 means for releasing said maintaining means,

31 whereby

32 the tire drops to engage such surface and at which dropping said indicator means

33       halts on said one of said members at a gauge reading to indicate the co-  
34       efficient of friction of the surface to which the tire drops.

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2 8.  
3 The apparatus of claim 7 wherein  
4 a single one of said standards supports said frame at its rear, and  
5 said maintaining means comprises  
6 a bell-crank assembly having a pivotal mount pivotally mounted on and at the rear  
7 of said frame and having a first arm and a second arm on opposite sides of  
8 the pivotal mount,  
9 bearing means mounted on said first arm,  
10 means for pivoting the second arm on the other side of the pivotal mount,  
11 said single one of said standards including a latch means,  
12 said bearing means engaging said latch means in the cocked condition,  
13 whereby  
14 upon actuation of said pivoting means, said bell-crank assembly turns on its  
15 pivotal mount to disengage said bearing means from said latch means and  
16 thereby lower the frame on said one of said standards.

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19 9.

20 In the apparatus of claim 8 wherein  
21 said pivoting means comprises  
22 solenoid means having a reciprocable rod and being fixedly connected to said  
23 frame which when energized retracts said rod thereby turning said second  
24 arm about the pivotal mount.

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27 10.

28 In the apparatus of claim 9 wherein  
29 said solenoid means includes linkage connecting its rod to said second arm.

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2 11.

3 In the apparatus of claim 10 wherein  
4 a single one of said plurality of standards is disposed at the rear of said frame and  
5 comprises  
6 a threaded stem,  
7 said latch means is threadedly mounted on said stem, and  
8 handle means securely mounted to said latch means for adjusting said latch means  
9 along the length of said stem,  
10 whereby the position of the cocked condition of said mechanism to said frame is  
11 adjustable along the length of said stem.

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14 12.

15 In the apparatus of claim 11 wherein

16 said latch means comprises

17 a threaded sleeve and a ledge at its bottom on which said bearing means seats in  
18 a cocked condition for said mechanism.

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21 13.

22 In the apparatus of claim 12 wherein

23 said bearing mean comprises

24 a roller.

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26 14.

27 In the apparatus of claim 7 wherein

28 the wheel includes an axle.

29 said rotating means further comprising

30 a second sprocket wheel secured to said axle and

31 a toothed pulley drive belt operatively connecting the first sprocket wheel and  
32 second sprocket wheel together.

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